Contents

List of Figures XV
List of Tables XIX
List of Abbreviations XXI
1 Introduction 1
1.1 Context, Research Gap, and Research Approach 1
1.2 Research Questions 7
1.3 Structure of Dissertation 9
2 Phenomenological Background 11
2.1 Lead Markets 11
2.1.1 Research Leading Up to Lead Market Theory 11
2.1.2 The Formalization of Lead Market Theory: Beise and the System of Lead Market Factors 15
2.1.3 Application of Lead Market Theory to Product, Service, and Technology Innovations 22
2.1.4 An Introduction of Lead Market Theory into Policy Making 24
2.2 Demographic Change and Aging 26
2.2.1 Demographic Change 26
2.2.2 Aging 30
2.3 Age-Based Innovations 42
2.3.1 Age-Based Innovations Research 42
2.3.2 Adoption and Diffusion Research in the Context of Aging 43
2.3.3 Age-Based Innovations: Theoretical Context and Special Characteristics 46
3 Case Studies: Early Adoption Patterns and Lead Markets 51
3.1 Introduction and Methodology 51
3.1.1 Link to Research Questions 51
3.1.2 Case Study Analysis: Rationale and Structure 51
3.1.3 Choice of Product and Service Categories 53
3.1.4 Information Sources 53
3.2 The Case of Stair Lifts 54
3.2.1 Stair Lifts as Age-Based Innovations 54

3.2.2 Timeline of Events: Development, Initial Adoption, and Early Diffusion 54
3.2.3 Observations 58
3.2.4 Lead Market Factors 61
3.3 The Case of Rollators 69
3.3.1 Rollators as Age-Based Innovations 69
3.3.2 Timeline of Events: Development, Initial Adoption, and Early Diffusion 70
3.3.3 Observations 72
3.4 The Case of Reverse Mortgages 78
3.4.1 Reverse Mortgages as Age-Based Innovations 78
3.4.2 Timeline of Events: Development, Initial Adoption, and Early Diffusion 80
3.4.3 Observations 82
3.5 The Case of Assistive Social Robots for Eldercare 90
3.5.1 Assistive Social Robots as Age-Based Innovations 90
3.5.2 Timeline of Events: Development, Initial Adoption, and Early Diffusion 91
3.5.3 Observations 92
3.6 Intermediate Conclusions 95
4 Integrated Analysis of Lead Market Candidates Based on Extant Theory 99
4.1 Introduction 99
4.2 Lead Market Location for Age-Based Innovations 101
4.2.1 Demand Advantage 101
4.2.2 Price Advantage 105
4.2.3 Transfer Advantage 110
4.2.4 Export Advantage 112
4.2.5 Market Structure Advantage 120
4.2.6 Conclusions about Lead Market Candidates 121
5 Market Participant Study 125
5.1 Introduction 125
5.2 Study Design 125
5.2.1 Thematic Focus 125

5.2.2 Study Design Parameters 129
5.2.3 Study Participants 131
5.2.4 Study Implementation 132
5.2.5 Participation 134
5.3 Study Results 135
5.3.1 International Diffusion of Innovations and Country-Specific Differences in Demand 136
5.3.2 Existence and Location of Lead Markets 136
5.3.3 Factors Contributing to Lead Market Location 138
5.3.4 The Customers' Role in Innovation 142
5.3.5 Sales and Distribution 143
5.3.6 Company Information 145
5.3.7 Participant Information 145
5.3.8 Cross Table Analyses 147
5.3.9 Further Observations 153
5.4 Discussion and Implications 155
5.4.1 Lead Market Existence 155
5.4.2 The Question of Supply Side Challenges 156
5.4.3 The Customers' Role in Innovation 158
6 Intermediate Results 161
6.1 A Typology of Age-Based Innovations 161
6.1.1 Typology 161
6.1.2 Sub-Group Classic Market Mechanism (Sub-Group 1) 164
6.1.3 Sub-Group Self-Help and Compassion (Sub-Group 2) 165
6.1.4 Sub-Group Public Intervention (Sub-Group 3) 166
6.1.5 Mapping of Age-Based Innovations on Typology Matrix 167
6.1.6 Sub-Group Selection for Further Research 169
6.2 Age-Specialized Innovations: Stakeholder Structure and Implications 169
6.3 Self-Help and Compassion (Sub-Group 2): Observations and Propositions 171
6.3.1 User Innovation and "Compassionate" Innovation 171

6.3.2 Country of Invention as Initial Leader in Adoption 172
6.3.3 Potential Shifts in Lead Market Location 174
6.3.4 Propositions 175
6.4 Public Intervention (Sub-Group 3): Observations and Propositions 179
6.4.1 Public Intervention in the Development and Supply of Age-Based Innovations 179
6.4.2 Public Intervention in the Demand and Early Adoption of Age-Based Innovations 182
7 Expert Interview Series 185
7.1 Introduction 185
7.2 Study Design 185
7.2.1 Selection of Interviewing as Data Collection Method 185
7.2.2 Development of Proposition-Based Semi-Structured Interview Guide 188
7.2.3 Interview Partners 189
7.2.4 Notes on the Interviewing Process 191
7.2.5 Data Analysis Methodology 193
7.3 Study Results 196
7.3.1 Results for Proposition 1 196
7.3.2 Results for Proposition 2 202
7.3.3 Results for Proposition 3 210
7.3.4 Results for Proposition 4 218
7.3.5 Results for Proposition 5 222
7.3.6 Results for Proposition 6 226
7.3.7 Emerging Theme: Ongoing Changes in the Perception of Age and the Elderly 236
7.4 Discussion and Conclusions 237
7.4.1 Proposition 1 237
7.4.2 Proposition 2 239
7.4.3 Proposition 3 242
7.4.4 Propositions 4 and 5 243
7.4.5 Proposition 6 243
8 Discussion of Results, Implications, and Limitations 247

8.1 Discussion of Results 247
8.2 Implications for Research 253
8.2.1 Contributions to Research 253
8.2.2 Limitations 258
8.2.3 Opportunities for Further Research 261
8.3 Recommendations for Managerial Practice 263
8.3.1 Diversity of Lead Markets in Age-Based Innovations 263
8.3.2 A Differentiated Evaluation of Lead Market Factors 264
8.3.3 Business Implications of Supply Side Challenges 265
8.3.4 Business Implications of Public Intervention in Age-Based Innovation Development 266
8.4 Recommendations for Policy Makers 267
8.4.1 Considering Supply Side Challenges in Policy 267
8.4.2 Revisiting Co-financing Schemes for Age-based Innovations 269
9 Bibliography 271
10 Appendix 305

http://www.springer.com/978-3-658-08814-9

Lead Markets in Age-Based Innovations
Demographic Change and Internationally Successful Innovations
Levsen, N.
2015, XXIII, 335 p. 52 illus., Softcover
ISBN: 978-3-658-08814-9